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09/993,335	11/06/2001	Charles Abraham	GLBL/022	5693

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EXAMINER

ISSING, GREGORY C

ART UNIT

PAPER NUMBER

3662 remail ORS

DATE MAILED: 03/11/2003 4-11-03

ORS

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,335

Applicant(s)

ABRAHAM, CHARLES

Examiner

Gregory C. Issing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/9/02.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41(42) is/are pending in the application.
- 4a) Of the above claim(s) 1, 10-25 and 34-41(42) is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-9 and 26-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 and 25, drawn to a method for determining a window of frequency search, classified in class 342, subclass 357.15.
 - II. Claims 2-9 and 26-33, drawn to a method of determining time of day, classified in class 342, subclass 357.10.
 - III. Claims 10-18 and 34-41, drawn to a method for determining position responsive to location or identification information, classified in class 342, subclass 357.09.
 - IV. Claims 19-24, drawn to a GPS mobile receiver, classified in class 342, subclass 357.06.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II/III/IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as frequency determining receiver that does not determine time of day information, require cellular location or identification information to determine position nor a GPS/cellular processor. See MPEP § 806.05(d).
3. Inventions II and III/IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as positioning

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receiver that does not require cellular location nor id information in order to determine position nor does it require separate GPS and cellular front ends sharing a processor. See MPEP § 806.05(d).

4. Inventions III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention IV has separate utility such as a GPS receiver that does not require location or identification information received from a cellular base station in order to determine location. See MPEP § 806.05(d).

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

7. Note: there are two claims that are numbered 39. Only 41 claims have been paid for. At this time, each of the claims 39 has been indexed as non-elected and withdrawn from consideration.

8. During a telephone conversation on 2/26/03, a provisional election was made without traverse to prosecute the invention of Invention II, claims 2-9 and 26-33. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1, 10-25, and 34-41 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected inventions.

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9. The drawings are objected to because Figure 2 and the specification on page 8, show/describe the same element "telephone" differently. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 2-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

12. The reception and use of a cellular network's signals without being a subscriber are not sufficiently enabled.

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

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do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

14. Claims 2-9 and 26-33 are rejected under 35 U.S.C. 102(a) as being anticipated by Kurby.

15. Kurby et al disclose a method and portable apparatus for receiving a GPS signal comprising a first satellite receiver for obtaining a first satellite data stream, which meets the scope of a time synchronization burst, formatted with time frames including an absolute satellite time and a frame time associated with the absolute satellite time, a microprocessor for determining an absolute device time that is synchronized with the absolute satellite time, and a GPS receiver for receiving the absolute device time to synchronize the GPS receiver with a plurality of GPS satellites and calculating location therefrom. The communication satellite(s) comprise(s) a cellular network in view of the suggestion of the use of Globalstar. The portable apparatus is not required nor is there any necessity to transmit a signal to the communication satellite. There is nothing in the disclosure of Kurby et al regarding the requirement of any subscriber service. The determinations of satellite/user positions/velocities are conventional, well-known functions provided by the navigation utilities of a GPS receiver. The determination of time of day is inherent in view of the conventional operation of the GPS receiver which requires such information in order to select the satellites to acquire from the almanac. Thus, Kurby et al teach a method for rapid infrastructure aided acquisition of time data for use by a GPS receiver provided from a cellular network.

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16. Claims 2-9 and 26-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Krasner.

Krasner discloses a method and apparatus for determining time for a GPS receiver wherein a system time is transmitted in a synchronization channel from a cellular network, received by the mobile device and used to aid the GPS receiver during its initial search for in-view satellites. A cellular receiver combined with the GPS receiver receives the synchronization signal transmitted by a cellular network base station, for example in a CDMA system, and uses the synchronization signal, exemplified in Figure 4A, to provide the required timing information to initially select the in-view satellites from almanac data, determine pseudoranges and subsequently self-determine the mobile device position for navigation functions. In the embodiment of self-determined position there is no requirement for the mobile device to transmit any signals. Additionally, there is nothing in Krasner requiring the mobile user to have a subscription with the cellular network, particularly in the embodiment for self-determined position where there is no necessity to transmit any information to the cellular network.

17. Claims 2-9 and 26-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Naruse.

Naruse discloses a combined GPS receiver and CDMA signal receiver wherein the CDMA receiver receives a signal from a cellular network, obtains a synchronization signal therefrom, and uses the synchronization signal in the GPS receiver to quickly and accurately acquire GPS signals resulting in reduced power consumption. There is no requirement for the GPS receiver to transmit information to the base station nor be a subscriber to the network nor is it shown.

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18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 2-9 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eshenbach in view of either one of Smith et al or Nir et al .

Eshenbach teach a GPS receiver 12 that includes an additional radio receiver 14 wherein the radio receiver 14 receives a radio signal having a standard time and/or carrier frequency, decoding the standard time from the radio signal and using the standard time for resolving a GPS signal. Eshenbach suggests the use of stations such as WWV, WWVH, WWVB, CHU and GOES broadcast radio signals that are known to have a standard time and frequency. Eshenbach differ from the claimed subject matter since the transmitters of the standard time are not disclosed as comprising a cellular network. Smith et al teach that besides GPS, WWV and GOES satellites providing stable reference sources, CDMA cell-phone base stations also are a stable source of synchronization. Nir et al teach the use of a cellular network source out of which synchronization data is extracted so as to enhance the accuracy of pseudorange measurements as well as decrease the time required for increased sensitivity in correlating weak GP signals. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Eshenbach by decoding a standard time signal, synchronization frame, from a cellular base station in view of the fact that they are known to be a stable source of synchronization and in view of the fact that there are numerous cellular base stations already

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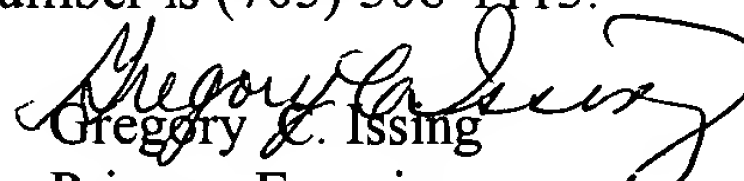
available and already broadcasting the timing signal thereby providing good coverage without requiring any new expense.

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Funderburk et al disclose a precision reference generation system for generating precision frequency and timing information from a CDMA pilot signal. Wheatley discloses conventional acquisition of IS-95 CDMA system pilot signals wherein a mobile searches a known frequency for all arrivals of a pilot sequence until it finds the largest correlation peak; once the pilot is acquired, the mobile is able to demodulate the synch channel, recover time of day and align its clock to system time.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (703)-306-4156. The examiner can normally be reached on Mon-Thurs 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (703)-306-4171. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.


Gregory C. Issing
Primary Examiner
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gci
March 6, 2003